No. 656,284. Patented Aug. 21, 1900.

M. FRÖSCHL.

SYSTEM OF NON-INTERCHANGEABLE CONTACT PARTS.

(Application filed Sept. 2, 1899.)

(No Model.)

Fig. 1.

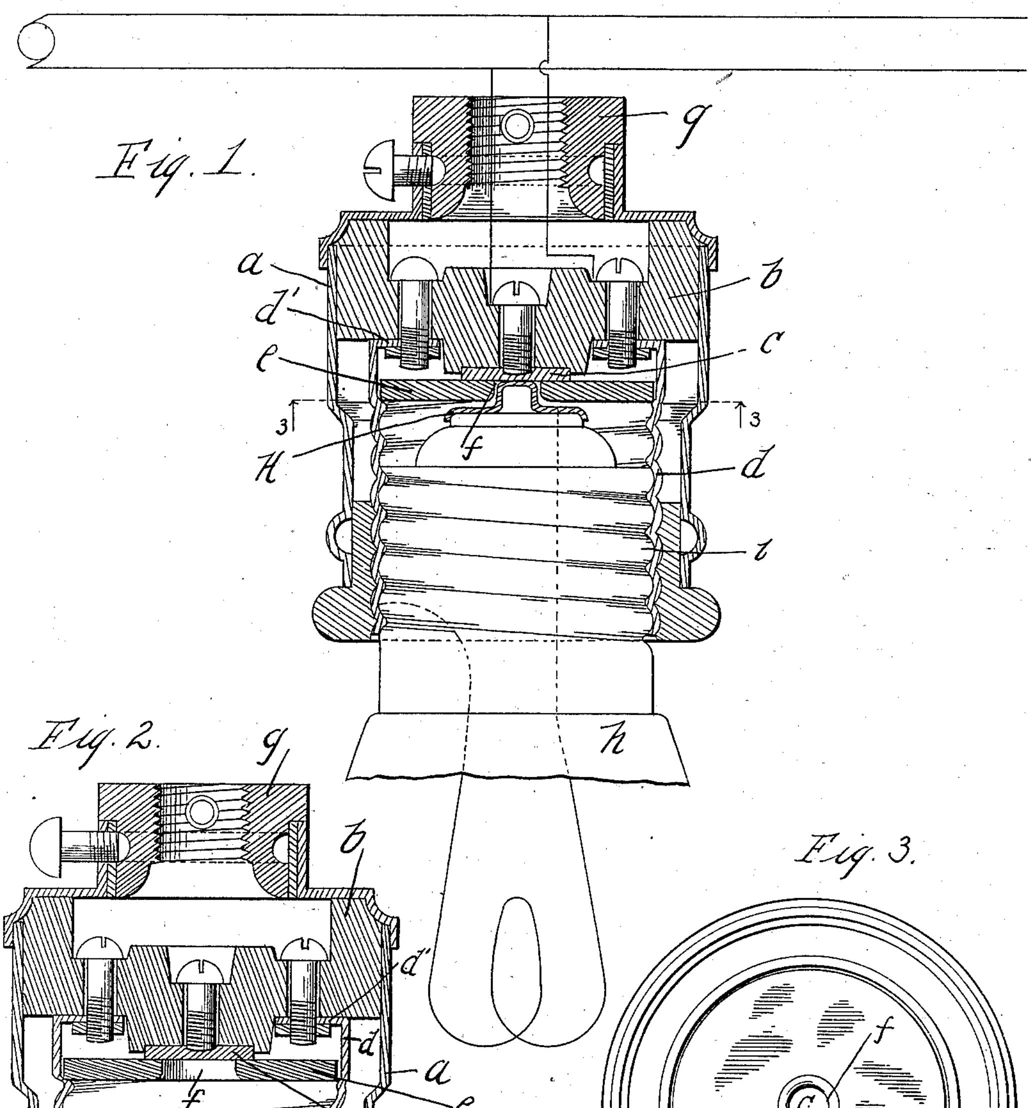


Fig. 2.

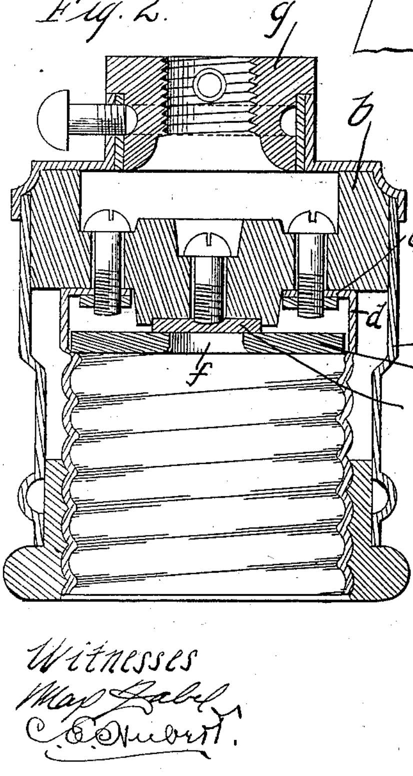
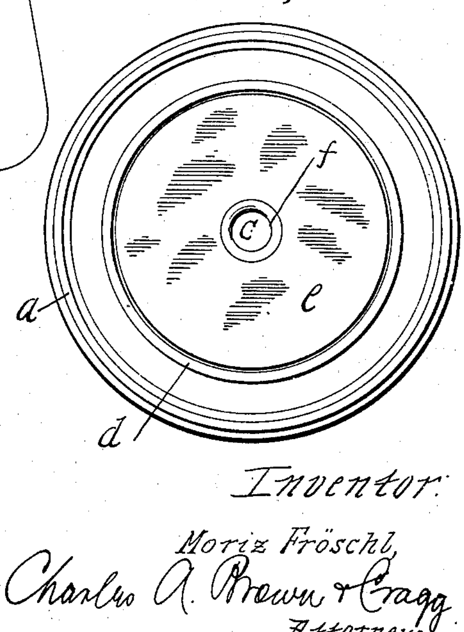


Fig. 3.



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UNITED STATES PATENT OFFICE.

MORIZ FRÖSCHL, OF VIENNA, AUSTRIA-HUNGARY, ASSIGNOR TO THE SIEMENS & HALSKE ELECTRIC COMPANY OF AMERICA, OF CHICAGO, ILLINOIS.

SYSTEM OF NON-INTERCHANGEABLE CONTACT PARTS.

SPECIFICATION forming part of Letters Patent No. 656,284, dated August 21, 1900.

Application filed September 2, 1899. Serial No. 729,345. (No model.)

To all whom it may concern:

Be it known that I, MORIZ FRÖSCHL, residing at Vienna, Austria-Hungary, have invented a certain new and useful Improvement in Systems of Non-Interchangeable Contact Parts, (Case No. 240,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to a system of non-interchangeable contact parts, and has for its object the provision of improved means for preventing the improper establishment of connection between the terminals of an electric circuit.

More particularly, my said invention aims, through the agency of improved means, to prevent the insertion in a given terminal socket of a lamp or fuse, for example, the capacity of which is greater than is designed for the said socket. In many instances it is highly desirable to secure electrical apparatus wherein the translating devices or fuses of various capacities are not interchangeable. The necessity for such apparatus is at once apparent when it is considered that in electrical practice certain portions of the apparatus are used and controlled by those who are unskilled in the art or are desirous of using translation devices of greater capacity than those for which the proposed circuit considered is designed.

My invention has for its object the provision of an improved device whereby sockets commonly known as "Edison plug-sockets" that have already been installed may readily be equipped to prevent translating devices from being interchanged.

In accordance with my invention I provide a plurality of Edison sockets having interior threads for the reception of plugs attached to lamps or other translating devices and having a centrally-disposed contact element and place within each of these sockets a disk of fiber having a central opening in alinement with the central contact portion, the said disk of fiber being interposed between the thread in the socket for receiving the plug and the said central contact, the fiber being of such a width as to be incapable of axial play, whereby additional fastening devices are not required to secure the insulating-disk in place. The central apertures in the insulating-disks of the different sockets are of different sizes. The plugs for insertion within the sockets are provided with tips of different sizes, the larger tips of course being incapable of insertion through smaller apertures.

I will explain my invention more particularly by reference to the accompanying drawings, in which—

Figure 1 is a sectional view showing a socket with a lamp in place therein, the socket being provided with a guarding insulating-washer in accordance with my invention. Fig. 2 is a similar view, a washer being shown with a hole of larger size. Fig. 3 is a sectional view on line 3 3 of Fig. 1.

Similar letters of reference indicate like parts in all the figures.

In the casing *a* of each lamp-socket is provided the porcelain base *b*, which carries the terminal parts of the connected circuit. One contact part is in the form of a centrally-disposed metallic plate *c*, adapted for engagement with one terminal of the translating device. An interiorly-threaded terminal shell *d* is also mounted upon the porcelain base and is adapted for connection with the remaining and threaded terminal of the translating device. The guarding-washers *e e* in the different lamp-sockets are provided with central apertures *f f* of different sizes. These apertures expose the central contact-plates *c*. It is not necessary that the washers be completely circular. The washer must be so shaped that that portion containing the aperture will not be displaced from the central contact. Each threaded terminal shell *d* is provided with interiorly-projecting ears *d'*, by means of which the said shell is secured upon the said porcelain base.

Where sockets that are already in place are to be equipped with my device, the attaching-nipple *g* is unscrewed, the terminal *d* is re-

moved from its supporting-base, and the insulating-washer *e* is inserted within the interior of the shell, whereupon the parts may again be reassembled. The insulating-washer being interposed between the contact *c* and the threads of the part *d* the washer is held by the said threads and contact part *c* firmly in place. The construction is such that the washer cannot be removed from the mouth of the socket, as the diameter of the thread is smaller than the diameter of the washer. The lamps or translating devices *h* are provided with threaded terminals *i* and terminal tips *k*, the latter being suited to respective openings in the washers.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a terminal socket, the combination with a base portion *b*, of a threaded terminal contact-shell *d*, means for removably securing the threaded shell to the base *b*, a second contact-terminal *c* also mounted upon the base portion *b*, and a guarding-washer interposed between the contact-terminal *c* and the threaded portion of the contact-shell *d*, said washer being provided with an aperture therethrough to permit of engagement of a contact, carried by a plug inserted within the socket, with the terminal *c*, the interior diameter of the thread of the shell *d* being smaller than the diameter of the washer, the thread of the contact-shell directly engaging and securing the guarding-washer in position, whereby screws for securing the washer in place may be dispensed with, substantially as described.

2. In a system of non-interchangeable electrical contact appliances, the combination with sockets, each provided with a base portion *b*, a threaded terminal contact-shell *d*, means for removably securing the threaded shell to the base *b*, a second contact-terminal *c* also mounted upon the base portion *b*, a guarding-washer interposed between the contact-terminal *c* and the threaded portion of the contact-shell *d*, said washer being provided with an aperture therethrough to permit of engagement of a contact, carried by a plug inserted within the socket, with the terminal *c*, the interior diameter of the thread of the shell *d* being smaller than the diameter of the washer, the thread of the contact-shell directly engaging and securing the guarding-washer in position, whereby screws for securing the washer in place may be dispensed with, the aperture in the guarding-washers of the different sockets being of different sizes, and plugs having threaded terminals adapted for engagement with the threaded terminals of the sockets and also having contact-tips of different sizes corresponding in size to the apertures in the washers of their respective sockets, substantially as described.

In witness whereof I hereunto subscribe my name this 2d day of August, A. D. 1899.

MORIZ FRÖSCHL.

Witnesses:
ALVESTO S. HOGUE,
AUGUST FUGGER.